

PATENT ABSTRACTS OF JAPAN

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(54) SEMICONDUCTOR DEVICE AND MANUFACTURE THEREOF

(57)Abstract:

PURPOSE: To readily and efficiently obtain a resin-sealed semiconductor device by forming leads on a substrate of glass epoxy, securing a pellet to the leads, wiring the leads and then sealing them with the resin.

CONSTITUTION: A through hole 27 is opened at the prescribed position of a rectangular substrate 26 made of glass epoxy plate, on both side surfaces of which copper foils are bonded, copper plating is performed on the inner surface of the hole 27 to connect the copper foils of both side surfaces, independent inner leads 12, outer leads 13 and connecting parts 13A of the leads 12, 13 are formed, thereby completing leads 15 which are then connected via connecting wirings 29. The leads 12 are covered in a strip shape with a resin film 20, and Au plating is performed on an Ni-base. Then, a recess 16 is formed at the center, punched grooves 31 are formed along the holes 27 at four peripheral sides, and a base 11 is supported at the part 32 by an outer periphery 33, the leads 13 are respectively isolated, and the wirings 29 are also cut, thereby completing a series package. Thereafter, a pellet is secured to the recess 16 by utilizing the hole 34 in a resin-sealed device by an automatic assembling. Since the package is simultaneously formed on the sole substrate, the manufacturing efficiency is higher than the case of ceramic and the steps of the manufacture can be facilitated.

